R E M A R K S

Reconsideration of this application, as amended, is respectfully requested.

THE PRIORITY DOCUMENT

It is respectfully requested that the Examiner complete item 12 of the Office Action Summary sheet to acknowledges the claim for foreign priority in the present application and to acknowledge that a certified copy of the priority document has been received.

THE DECLARATION

The Examiner has checked item 11 of the Office Action Summary sheet to indicate that the Declaration is objected to. However, no reason is provided in the Office Action. Clarification is respectfully requested.

THE CLAIMS

Claims 1, 8 and 15 have been amended only to make some minor clarifications, in particular by moving the subject matter relating to the system in which the present invention is applied into the preambles of the claims, so as to put them in better form for issuance in a U.S. patent.

No new matter has been added, and it is respectfully requested that the amendments to the claims be approved and entered.

It is respectfully submitted, moreover, that the amendments to the claims are not related to patentability, and do not narrow the scope of the claims either literally or under the doctrine of equivalents.

THE PRIOR ART REJECTION

Claims 1-20 were rejected under 35 USC 103 as being obvious in view of the combination of US 2003/0012188 ("Zelig et al") and US 2001/0008536 ("Kibe"). These rejections, however, are respectfully traversed.

The present invention provides a technique which makes it possible to confirm the transmission state of a communication network by associating the pointer value indicating the transmission state with each channel. More specifically, in the field of digital data transmission, there is a system called virtual concatenation, in which large-capacity data are transmitted by efficiently utilizing the existing communication network in the following manner. Large capacity data is divided and contained into a plurality of small capacity virtual containers, and after the low capacity data contained in these virtual containers are transmitted via a plurality of channels,

the data is correctly assembled and multiplexed to be transmitted to a large-capacity channel. Here, the respective channels configuring the existing network have respectively different transmission capacities and different transmission distances. Therefore, it is important to grasp in advance the difference in the amounts transmission is delayed between the respective channels and the amount of variations in phase. When the difference in the amount the transmission is delayed between the channels is a certain amount of time or more, the divided virtual containers cannot be correctly assembled into the original frame, thereby causing troubles in the communications.

The present invention is directed to a technique in which pointer values (channel pointer values) indicating transmission states of the channels in the communication network operating under the virtual concatenation system, that is, the transmission delays and the variations in phase due to the difference in clock between each of the small-capacitor channels and the large capacitor channel, are associated with respective channels, so as to enable visual monitoring.

Zelig et al is directed to a technique of multiplexing signals of a low group with those of a high group and transmitting these signals via an IP network (for example, MPLS: Multi-protocol label switching). The signals to be transmitted are SDH signals, which are packetized and transmitted, and the

original SDH signals are restored on the receiver side. It is respectfully submitted that Zelig et al is directed to a device in which channel pointers of the transmitter's side contained in the SDH signals are directly sent to the receiver's side. And it is respectfully submitted, therefore that there is no merit in displaying the values of channel pointers for comparison in the invention of Zelig et al.

Kibe is directed to a device which judges the justification function for the channel pointer values of SDH signals. That is, in the SDH signal transmission system, when data of the channels are multiplexed and inserted into a frame, the location of insertion is displaced due to, for example, the phase difference between the multiplexed data and the frame into which the data is inserted. The displacement of the location is absorbed by adjusting the channel pointer values. The adjustment of the channel pointer values is called justification. The channel pointer values are limited within a predetermined range and when there are consecutive pointer values falling out of this predetermined range, the data transmission cannot be properly carried out. In the case where values falling out of the predetermined range or some abnormal state occur continuously a preset number of times, it is necessary to issue an alarm. When such an SDH signal process is carried out, it is necessary to check if the justification is properly functioning by analyzing

the increment/decrement state of each channel pointer inserted into the SDH signal, the range of the pointer values, and the like. According to Kibe, the pointers of a plurality of channels inserted into the frame of the SDH signal are analyzed so as to check whether or not the justification is properly functioning for the plurality of channels at the same time.

The Examiner asserts that the combination of Zelig et al with Kibe renders obvious each of claims 1-20.

It is respectfully submitted, however, that the present invention is directed to a technique in which when large-capacity data are transmitted by the system called virtual concatenation, the pointer values which indicate the transmission state of each channel, that is, transmission delay, variation in phase due to the difference in clock between a plurality of small-capacity channels and large-capacity channel, are associated with the respective channels, when they are visually checked. By contrast, according to Zelig et al, data of a low group is multiplexed and the multiplexed data is transmitted via the HD network. Thus, the technique of Zelig et al is reversed as compared to the technique of the present invention as recited in independent claims 1, 8 and 15. According to Zelig et al, the channel pointers of the transmitter side are sent directly to the receiver side and the original SDH signal is assembled. It is respectfully submitted, therefore, that Zelig et al clearly

differs from the present invention as recited in independent claims 1, 8 and 15.

Kibe, moreover, is directed to a technique of checking the justification function for the channel pointer values of each channel when data of a low group (low speed) are multiplexed. Thus, the technique used by Kibe is clearly different from the present invention in which transmission delay and variation in phase due to the difference in clock between each of a plurality of small-capacity channels and a large-capacity channel, are associated with each respective channel, when they are displayed.

It is respectfully submitted that neither Zelig et al nor Kibe suggests a technique similar to that of the present invention as recited in independent claims 1, 8 and 15. And it is respectfully submitted, therefore, that even if Zelig et al and Kibe were considered in combination, the present invention as recited in independent claims 1, 8 and 15 still would not be achieved or rendered obvious.

In view of the foregoing, it is respectfully submitted that the present invention as recited in independent claims 1, 8 and 15, and claims 2-7, 9-14 and 16-20 respectively depending therefrom clearly patentably distinguish over Zelig et al and Kibe, taken singly or in combination, under 35 USC 102 as well as under 35 USC 103.

Entry of this Amendment, allowance of the claims and the passing of this application to issue are respectfully solicited.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

Respectfully submitted,

/Douglas Holtz/

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